

BEST AVAILABLE COPY

PATENT



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

ROBINSON et al.

CASE NO: AM100401 US

SERIAL NO: 10/705,716

GROUP ART UNIT: 1653

FILED: NOVEMBER 10, 2003

EXAMINER: A. DESAI

FOR: A NOVEL PTH RESPONSIVE GENE

**DECLARATION UNDER 37 C.F.R. § 1.131**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In the Non-Final Office Action mailed on December 16, 2004, the Examiner rejected claims 8-12 and 38-42 under 35 U.S.C. § 102(e) as being anticipated by *Afar et al.* (WO 03/025138) and, in the alternative, as being anticipated by *Tanner et al.* (U.S. Patent Publication No. 2003/0119043). Specifically, the Examiner asserted that SEQ ID NO:4 of the above-identified application was anticipated by *Afar et al.* and, in the alternative, *Tanner et al.*

We declare that the amino acid sequence at issue, SEQ ID NO:4, was reduced to practice in the United States prior to the 102(e) date of either *Afar et al.* or *Tanner et al.* Further to this declaration, we attach signed notebook pages (Exhibit 1), with dates redacted, that exemplify the human PAIGB protein (see highlighted text).


As a person signing below:

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true. I also declare that all statements were made with knowledge that willful false statements, and the like, are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and any such willful false

Ser. No. 10/705,716  
Docket No. AM100401 US

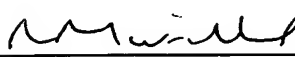
statements may jeopardize the validity of either the patent application or any patent issuing thereon.

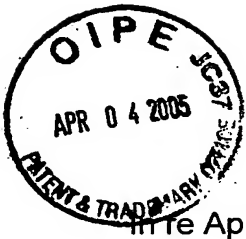
Respectfully Submitted,

 3/22/05  
\_\_\_\_\_  
John A. Robinson Date

\_\_\_\_\_  
Vedrana Stojanovic-Susulic Date

\_\_\_\_\_  
Philip Babij Date

 3/21/05  
\_\_\_\_\_  
Richard J. Murrills Date



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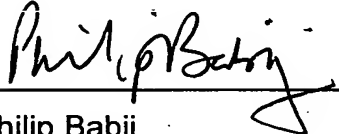
John A. Robinson

Date

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Vedrana Stojanovic-Susulic

Date

 3-25-05

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Philip Babij

Date

---

Richard J. Murrills

Date



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Respectfully Submitted,

---

John A. Robinson

Date

*V. S. Susulic*

*3/24/05*

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Vedrana Stojanovic-Susulic

Date

---

Philip Babij

Date

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Richard J. Murrills

Date

Work continued from Page

REDACTED

Page 1

Page 3

r3f22 g+i 8-16-00.mpd (1 > 2176) Site and Sequence

Page 2

Page 1

REDACTED

r3f22 g+i 8-16-00.mpd (1 > 2176) Site and Sequence

Enzymes : 126 of 478 enzymes (Filtered)

Settings : Circular, Certain Sites Only, Standard Genetic Code

i(G)

BspDI

EcoRV

Eco52 I

Asc I

Cla I

EcoR I

BssS I

Xma III

BssH II

CGGTATCGATACGCTTGATATCGAATTCGGCACGAGCCGGGCTGAGCCGAGCCGAGCCGCAAGCCGAACGGCCGCTGGGCGCGCCCGC  
GCCATAGCTATGCGAACTATAGCTTAAGCCGTGCTCGGCCGACTCGGCGTCGGCGTCGGCGTTTCGGCTTGCCGGCGACCCGCGCGGGCG 90

R Y R Y A . Y R I R H E P G . A A A A A A S R T A A G R A R  
G I D T L D I E F G T S R A E P O P O P O A E R P L G A P A  
T V S I R L I S N S A R A G L S R S R S R K P N G R W A R P

Bsa I

Eco31 I

Cfr9 I

PspA I

Xma I

Sma I

Tth111 I

AACAGGGGAGGATGGGCTGGCGGGGAGCCGAGCCGATGCCATCGAGCCCCGCTACTATGAGAGCTGGACCCGGGAGACCGAGTCCACCT  
TTGTCCCCCTCTACCCGACGCGCCCTCGGCTCGGCTACGGTAGCTCGGGGCGATGATACTCTCGACCTGGGCCCTCTGGCTCAGGTGGA 180

N R G G W A A A G A E P M P S S P A T M R A G P G R P S P P  
T G E D G L R R E P S R C H R A P L L . E L D P G D R V H L  
O Q G R M G C G G S R A D A I E P R Y Y E S W T R E T E S T

Bsg I

GGCTCACCTACACCGACTCGGACGCGCTGCCAGCGCCGAGCCACGGACAGCGGCCCGAGGCGGGCGGCTGCACGCGGGTGTGCTGG  
CCGAGTGGATGTGGCTGAGCCTGCGCGACGGGTCGCGGCTCGGTGCTGTGCCGGGGCTCCGCCCGGACGTGCGCCACACGACG 270

G S P T P T R T R C P A P O P R T A A P R R A A C T R V C W  
A H L H R L G R A A O R R S H G O R P R G G R P A R G C A G  
W L T Y T D S D A L P S A A A T D S G P E A G G L H A G V L

Bbs I

EclHK I

Pst I

BspM I

SanD I

EclHK I

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TTCTGCCCGGCGAGGAGATTGCCACACGAGGCTGGACGTGGGGTCCACCTTATCGGTTGGGTCTCTTCTTCTACTTGACACCTCGGTTA 360

K T G R P L T V C S D L O P O V E . P T Q R R R . T V G P N  
R R A V L . R C A P T C S P R W N S O P R E E D E L W D P M  
E D G P S S N G V L R P A A P G G I A N P E K K M N C G T O

SIGNATURE

V. S. Sesulic

DATE

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Work continued from Page

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Page 4

Page 3

Page 2

3f22 g+i 8-16-00.mpd (1 &gt; 2176) Site and Sequence

22 g+i 8-16-00.mpd (1 &gt; 2176) Site and Sequence

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Bpu10 I

Xcm I

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V P T H R A S A O A L . P R S R M A F G P O R L K G M P S E  
S O L T E P O L R P S D P E A E W P L D H R G . K G C O A N  
C P N S O S L S S G P L T O K O N G L W T T E A K R D A K R

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C L O E K S L S A S O R I S G R W T E V K G S O R T A S I S  
V C K R S R Y O R H R E Y P A D G O K . K G H K E L H O L A  
M S A R E V A I S V T E N I R O M D R S K R V T K N C I N

AlwN I

Ssp I

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TCACAGACCCACACCTTCGTGTACTTGAAGAAACACCGCAGGTCAGTTCTTATAACTTCTTACCCACAGTGAGTGACTTGCACCTACG

S V W V W K H M N F F V A S S O R I L K K W V S L T E R G C  
V S G C G S T . T S L W R P V K E Y . R S G C H S L N V D A  
Q C L G V E A H E L L C G V O S K N I E E V G V T H . T W M

Dra III

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L . A T H G H P R G D D H P G F L F I T Y R K Y I E K S W N  
S E R R T A T H A V T T I P V S C L S H T E N T S K S P G I  
P L S D A R P P T R . R P S R F P V Y H I O K I H R K V L E

Xmn I

Van91 I

Pst I

AlwN I

BstAPI

Bsp19I

Nco I

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TACAAGTGTCTAACGGTTTGATACCAAACAAAAAGGAGAGACGTGAAGGCATCGTCCAGACGACATTGGTACCACTTCGGGCACCCGG

M F T D C O T M V C F S S L O L P . O G L L . P W . S P W A  
C S O I A K L W F V F P L C S F R S R V C C N H G E A R G P  
Y V H R L P N Y G L F F L S A A S V A G S A V T M V K P V G

Work continued to Page

GNATURE

V. S. Sesulic

DATE

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REDACTED

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3/22 g+1 8-16-00.mpd (1 > 2176) Site and Sequence

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Bsp I  
BspM I  
BspLU11 I  
Apa I  
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G F R I T M S H V W G P C T O P A P A L G P S S M W L F P  
A S E S O C H M F G A L A P N L H P L W D L A P C G F S H S  
W L P N H N V T C L G P L H P T C T R F G T L H V A F P I

Ctr9I  
PspAI  
Xma I  
Sma I  
Bpm I  
Pvu II  
CTTTCTAGTTCCTGTTCTTCTCATGGACTTTGTACTCCAGTCAGGTCATTTCAGCTGTAATCAAAGACTGGACACCACTCCCGGGGGA 135C  
GAAAGATCAAGGGACAAGAAGAGTACCTGAAACATGAGGTCAGTCCAGTAAACGTCGACATTAGTTTCTGACCTGTGGTGAGGGCCCCCT

L S S S L F F S W T L Y S S O V I C S C N O R L D T T P G G  
F L V P C S S H G L C T P V R S F A A V I K D W T P L P G E  
A F F P V L L M D F V L O S G H L O L S K T G H H S R G

BstE II  
Avr II  
Dra III  
Bgl I  
BsrG I  
AGGTGACCTAGGAACACATGGTGACACACATGCCCCCTTGGCCTTTCTGTACACAGCCCCAAGGACCGTGTATTTTGGTATCTGCA 144C  
TCCACTGGATCCTGTGTACCACTGTGTGTCTACGGGGGAACCGGAAGACATGTGTCGGGGTCTCTGGCAATAAAACCATAGACGT  
R P R N T W H T R C P L G L S V H S P K D R V I L V S A  
G D L G T H G D T H D A P L A F L Y T A P R T V L F W Y L Q  
K V T E H M V T H T M P P W P F C T O P O G P C Y F G I C

AlwN I  
Van91 I  
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K O L V W K A R A W L M Y I P A D I R P R R H C I G K O A A  
S N F G K P E P G C I F L L T S D O E G T V L E S R O P  
K A I S L E S O S L V D V Y S C H O T K K A L Y W K A G S

I 12556- 6

BOOK PAGE

TITLE

PROJECT NO

Page 6

Page 5

Work continued from Page

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T O P S H A L I W T L S P H S T H P P A K Y G T A V K  
Q H S Q A M L Y G P F P H I P K H I L L O S M A O P E F E

GGACCGTTCACTTGCTTGGGCTTATTAAGGTATAGTCCAAGTTGTGTCAAACCTGTATCAACAGACTCCACATCTAGCAGCAAGAGCAGT 171C  
CCTGGCAAGTGAACGAACCCGAATAATTTCCATATCAGGTTCAACACAGTTTGACATAGTTGTCTGAGGTGTAGATCGTCGTTCTCGTCA

G P F T C L G L L K V S K L C O T V S T D S T S S S K S S  
D R S L A W A Y R Y S P S C V K L Y O O T P H L A A R A V  
R T V H L L G L I K G I V Q V V S N C I N R L H I O O E O

BspLU11

Tth111

Bpu101

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L V T C L Y D T V O E K P K R A K M O M L T P V S E V I S  
W H V Y T T O S K R S N L S G L K C R C S R L S L K F L  
S G D M F I R H S P R E V T A G N A D A H A C L S D F

Eco571

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P T O T E L T V R L F V L K F T A N L V P A T V T D T E G  
O H R O N C K L C V Y S Y N S L P I L C O L O O T O R G  
S N T D R T V N C A F I R I K I H C O S C A S Y S N R H R G

GTTGGAGTCTGGCAGTCACGACCGTACATCTGACTCTATGGGGAGGCTTGAGACTCAGGAGAATGACCTGAACCTGCGGCACAGGACCA 198C  
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V G V W O S R P Y I L Y G E A D S G E P E P C G T G P  
L E S G S H D R T S D S M G R L E T O E N D L N P A A O D O  
G W S L A V T T V H L T L W G G L R L R R M T T L R H R T

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V.S. Susic

DATE

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**I 12556- 6**

BOOK PAGE

**TITLE**

PROJECT NO.

Page 6

Work continued from Page

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r3f22 g+i 8-16-00.mpd (1 > 2176) Site and Sequence

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BseR 1

BsrD | BstX |

BsrDI | BstXI |  
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 X V F S S A ? T T V

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T.I.A.V.E.S.H.F.V.K.G.S.F.L.S.I.A.N.V.C.L.L.L.C.?V.D.Y.S  
P.L.O.W.N.L.T.S.R.L.K.V.A.F.Y.P.S.Q.M.Y.V.F.S.S.A.?T.T.V  
N.H.C.S.G.I.S.L.L.G.R.L.S.I.H.R.K.C.M.S.S.P.L.P.C.R.L.O

ЕДИН

TTTCCCAACCTCTCTCACCTTGACTCCTGTCAAAGGGCTTTAGGGAAGCTTCATGTTCTGACAATTTAACTAATAAAACAAAAGCAAG 216C

AAAGGGGTTGGAGAGAGTGGAACTGAGGAACAGTTTCCCGAAAAATCCCTTGG  
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CCCCGTGAAAAAAAAA

CCCCGTGAAAAAAAAA  
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P R E K K  
P V K K K  
A P . K K N

Work continued to Page

GNATURE

DATE \_\_\_\_\_

**REDACTED**

TITLE

PROJECT NO.

Work continued from Page

R3F22 G+I 8-16-00.seq

REDACTED

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GAGCCGATGCCATCGAGCCCCGCTACTATGAGAGCTGGAC 160  
CCGGGAGACCGAGTCCACCTGGCTCACCTACCCGACTCG 200  
210 220 230 240  
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410 420 430 440  
GAAGCAGAATGGCCTTTGGACCACAGAGGCTAAAAGGGAT 440  
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REDACTED

R3F22 G+I 8-16-00.seq

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CTTCATGTTCTGACAATTTAACTAATAAAACAAAAGCAAG 2160  
CCCCGTGAAAAA 2176

Work continued to Page

SIGNATURE

V. S. Surulic

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